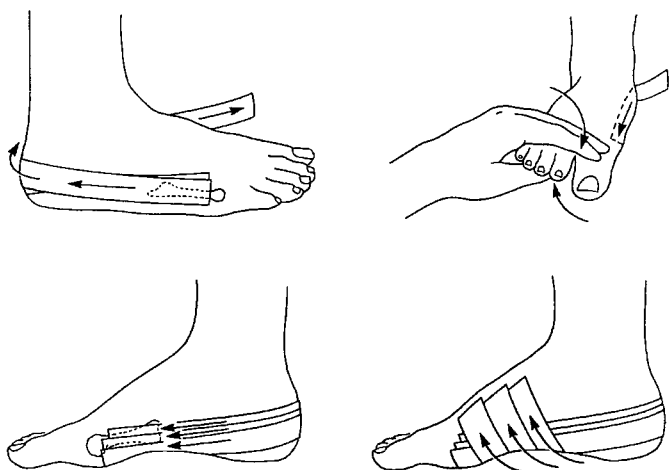


## Plantar Fascia Taping

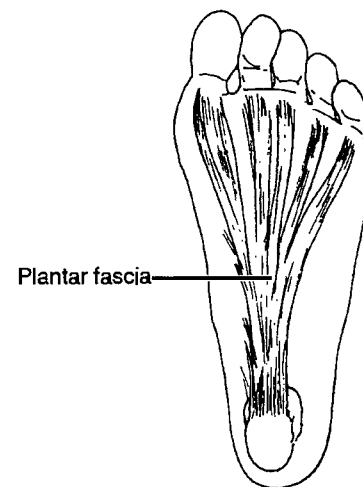
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## Physical Therapy

# Plantar Fasciitis



### WHAT IS PLANTAR FASCIITIS?

Plantar fasciitis is a prolonged overuse injury which causes pain in the heel, arch, and ball of the foot.

### WHAT IS THE PLANTAR FASCIA?

The plantar fascia is a dense band of connective tissue (like a ligament) on the bottom surface of the foot. It runs the length of your foot, forward, from the heel across the arch and inserts at the base of the toes. The plantar fascia acts to support the arch of the foot and works as a shock absorber during running and jumping.

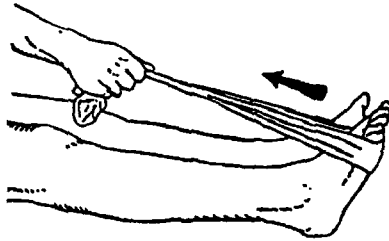
### WHAT CAUSES PLANTAR FASCIITIS?

Over time, usually many weeks, when too much stress is placed on the plantar fascia either by abnormal joint mechanics, increased mileage or increased force (such as running down hills), the tissues of the plantar fascia become inflamed and painful. This pain is usually first felt in heel (sometimes causing a heel spur), at the arch, or at the ball of the foot. Eventually, the pain may spread from one small point to the whole bottom of the foot.

Normally, the first few steps in the morning are the most painful as is running or prolonged standing.

**TOWEL / BELT STRETCH**

If you have pain stepping down out of bed or after prolonged sitting do this stretch. Using a towel or belt, pull the foot back until you feel a stretch at the arch and calf.

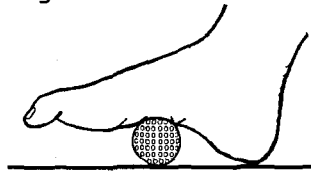


Hold the stretch for 30 seconds, do 3-5 reps, Do this stretch frequently as needed.

**GOLF BALL / CAN MASSAGE**

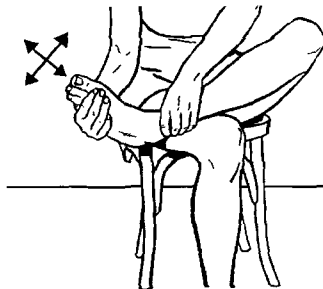
Using a golf ball or a food can roll and massage the arch of your foot slowly.

Massage the area for 5 to 10 minutes.

**THUMB DEEP FRICTION MASSAGE**

Using your thumb, press deeply over the arch and plantar fascia. Massage with and perpendicular to the arch.

Massage the area for 5 to 10 minutes.



**PHYSICAL ACTIVITY:** To decrease the symptoms of Plantar Fasciitis, you must reduce or stop the activities that increase pain. Especially high impact activities such as running and jumping. Biking and Stair climbing machines with a flat foot are usually safe aerobic activities as is swimming.

**INFLAMMATION:** Healing will occur more efficiently if swelling and inflammation is reduced. The following are effective ways to decrease inflammation.

**REST:** Limit or stop those activities that aggravate your pain.

**ICE:** Use an ice pack for 20 minutes or do an ice massage for 5 to 7 minutes frequently, especially after activity or with increased pain.

**COMPRESSION:** Taping the arch (see back of handout) will support the arch and help decrease swelling. Using full contact arch supports (from heel to where the toe bends) can also help support the arch and give compression.

**ELEVATION:** Elevating your foot above your heart for 10 to 20 minute periods helps reduce swelling.

**MEDICATIONS:** Aspirin or other anti-inflammatories (like aspirin) are good to take regularly with meals over a short period of time to decrease inflammation and pain.

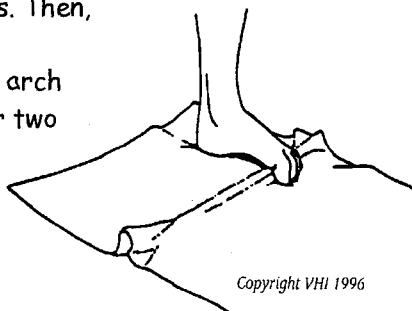
**STRETCHING & STRENGTHENING** It is important to stretch the plantar fascia gently as the tissues heal to prevent shorten and scarring which leads to re-injury. Strengthening exercises are also important for the muscles that support the arch to facilitate recovery and prevent re-injury.

**SHOES AND ARCH SUPPORT** Shoes with good arch support or arch inserts that support from heel to where the toes bend can reduce the stress on the plantar fascia

### TOE CURLS

Bunch up a towel curling your toes. Then, straighten the towel and repeat.

Do for 3 to 5 minutes (until your arch muscles fatigue), rest a minute or two and do 3 sets. Do this exercise 3 to 4 times per week.

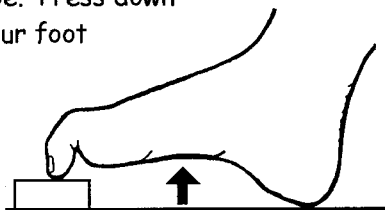


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### TOE PUSH UPS

This exercise can be done with the toes on a book, flat on the floor or even in your shoe. Press down with the toes raising the arch of your foot up.

Work for 3 to 5 minutes (until your arch muscles fatigue), rest a minute or two and do 3 sets. Do this exercise 3 to 4 times per week.

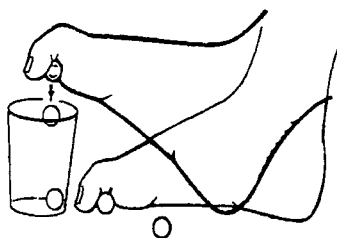


Exercise Picture Copyright VHI 1990

### MARBLE PICK UPS

Using the toes, pick up marbles from the floor and place them in a cup.

Work for 3 to 5 minutes (until your arch muscles fatigue), rest a minute or two and do 3 sets. Do this exercise 3 to 4 times per week.

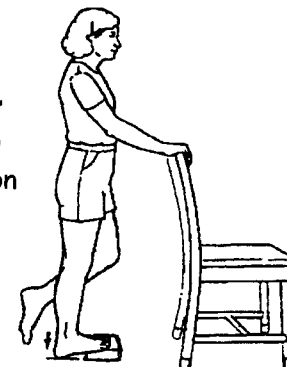


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### HEEL RAISES

Standing with the ball of your foot on a book or a step and holding something for balance, slowly lower the heel stretching the arch and calf. Then slowly raise up on the ball of your foot.

Do 15-20 repetitions, 3 sets.  
Do 3 to 4 days per week.

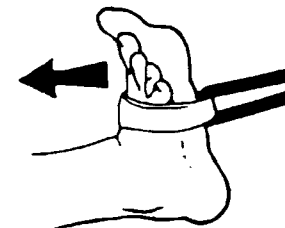


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### TUBING STRENGTHENING

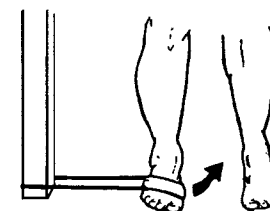
#### DORSIFLEXION STRENGTHENING:

Attach the tubing to a heavy table or chair and then around your foot. Pull up against the tube slowly getting as much motion as you can.



#### INVERSION STRENGTHENING:

Attach the tubing to a heavy table or chair and then around your foot. Push to the inside against the tube slowly getting as much motion at the ankle as you can.



Hold for 3 to 5 seconds, do 15 -20 reps, 3 to 4 days per week.

**WALKING**

Stay on level terrain, use a shoe with good arch support and cushioning.

**SWIMMING**

Almost no stress through the foot and arch.

**BIKING**

If it hurts pushing from the ball of the foot, use a flat foot on the pedal.

**CROSS COUNTRY SKI TRAINERS**

If it hurts pushing from the ball of the foot, use a flat foot on the step.

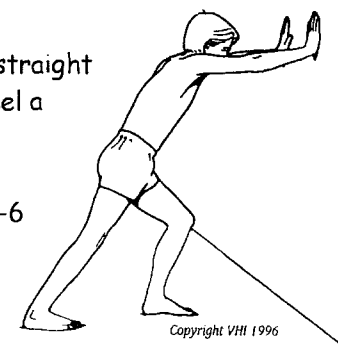
**STAIR MACHINES**

If it hurts pushing from the ball of the foot, use a flat foot on the ski.

**CALF STRETCHES**

Heel flat on the floor. Lock the knee straight and move the hips forward until you feel a stretch at the calf.

Hold the stretch for 30 seconds, do 3-6 repetitions. Do frequently as needed.

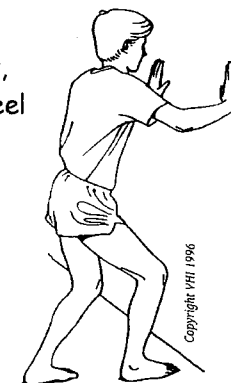


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**ACHILLES STRETCHES**

Heel flat on the floor. Bend the knee slightly, moving the hips forward and down until you feel a stretch at your achilles.

Hold for 30 seconds, do 3-6 reps, do frequently as needed.



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**KNEELING STRETCH (PLANTAR FASCIA)**

Slowly kneel down with the toes bent back. You should feel a stretch through the arch of your foot without pain. If painful, shift your weight slightly to the other leg.

Hold the stretch 30 seconds, do 3 to 6 repetitions.

